

CURRENT STATUS OF THE CLAIMS

In the Claims

The following is a marked-up version of the claims with the language that is underlined (“ ”) being added and the language that contains strikethrough (“”) being deleted:

1. (Currently amended) A pharmaceutical composition comprising:
an isolated SED1 polypeptide having an amino acid sequence selected from
SEQ ID NOs: 2, 4, 5, 6, or 7, ~~and comprising at least one discoidin/C domain,~~
wherein the polypeptide is in an amount effective to ~~modulate~~ inhibit mammalian
gamete adhesion, or in an amount effective to promote mammalian gamete
adhesion.
2. (Canceled).
3. (Previously presented) The composition of claim 1, further comprising a
pharmaceutically acceptable carrier or excipient.
4. (Previously presented) The composition of claim 1, wherein the polypeptide
competitively inhibits *in vivo* or *in vitro* binding of sperm to unfertilized zona
pellucida.
- 5-7. (Canceled).
8. (Currently amended) The composition of claim 1, wherein the isolated SED1
polypeptide compound binds to male gametes, female gametes, male and
female gametes, zona pellucida, or combinations thereof.
9. (Currently amended) The composition of claim 1, wherein the isolated SED1
polypeptide is a recombinant polypeptide ~~comprising SEQ ID Nos. 2-7 or a~~
~~fragment thereof, wherein the recombinant polypeptide modulates mammalian~~
~~gamete adhesion.~~
- 10-52. (Canceled)